

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining JOHN R. BAZA Division Director

June 9, 2015

CERTIFIED RETURN RECEIPT 7013 3020 0002 3659 5583

David Penney Penney's Gemstones, LLC 2400 East 30 South PO Box 312 Beaver, Utah 84713-0312

Subject: Review of Reclamation Surety, Penney's Gemstones, LLC, Lucin Variscite Mine,

S/003/0034, Box Elder County, Utah

Dear Mr. Penney:

As you requested, the Division of Oil, Gas and Mining has re-calculated the reclamation cost for the Lucin Variscite mine (S/003/0034), using site specific conditions as determined during an inspection of the site with you in November 2013. The Division apologizes for the length of time it has taken to finalize this cost estimate, and extra time will be allowed for providing the additional surety discussed below. The Bureau of Land Management has reviewed the Division's calculations and has concurred with the amount.

The amount needed for the reclamation surety is \$23,900.00. Attached is the cost estimate used to determine this amount. Please update the surety and provide the reclamation contract by November 9, 2015. A copy of the reclamation contract form is enclosed, and it may also be obtained on the Division's web site at https://fs.ogm.utah.gov/PUB/MINES/Minerals Related/FORMS/MR-RC-SMO.pdf.

The current reclamation surety (\$10,000.00) for this site is held by the BLM. You may provide the increased surety by 1) increasing the surety the BLM holds by \$13,900.00 (from the current \$10,000.00 to a total of \$23,900.00), or 2) providing a separate surety instrument for the increased amount, or 3) providing the Division with a single surety in the amount of \$23,900.00. If you provide a single replacement surety, the Division will request that the BLM release the surety it holds. Regardless of which agency holds the surety, both agencies need to be named as co-beneficiaries. You need to provide a reclamation contract to the Division, even if the BLM holds the surety.



David Penney Page 2 of 2 S/003/0034 June 8, 2015

Please contact Penny Berry at <u>pennyberry@utah.gov</u> or 801-538-5291 for assistance with the reclamation surety and reclamation contract requirements. The surety may be provided in the form of a surety bond, a letter of credit, cash, or a certificate of deposit. While the Division is allowing approximately 150 days for the surety to be increased, **you may not expand the disturbance until the increased surety is submitted and the reclamation contract is signed and notarized and submitted to the Division**.

Failure to provide the reclamation contract and additional surety by November 9, 2015, may result in enforcement action being taken together with associated fines.

Please contact Lynn Kunzler at 801-538-5310 or me at 801-538-5261 if you have questions concerning this letter.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB:lk:pb

Attachment: Bond Calculation Worksheet; Reclamation Contract cc: Michael Nelson, BLM (mnelson@blm.gov) w/attachment

David Penney via email (ep7art@mac.com)

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Lucin Variscite Reclamation Cost Calculation	Equipment	Hourly Operating	Equipment	Operator's Hourly	Hourly	Total Equipment			Equip/labor			
\$/003/0034	Cost	Costs	Overhead	Wage Rate	Cost	& Labor Costs Un	ts Quantity	Units	time	Units	C	ost
Direct Costs					2 6 6							
Grading - Main Dumps North & Northwest of Pit											7.00	
- Push upgradient waste dump material into pit (150ft)												
D8T (300 hp)	5460	100.65	0.1	76.75	337.62	337.62 /hr	2960	cu. yds.	7.5	hours	S	2,539
MSR260_A	2500	0	0.1	0	16	16 /hr	2900	Cu. yus.		hours	\$	120
PickupA	1015	0	0.1	0	6.34	6.34 /hr		_		hours		48
- Push down dump face to 2H:1V (<50 ft)		10 hg			0.04	0.04 ////			1.5	Tiours	Ψ	40
D8T (300 hp)	5460	100.65	0.1	76.75	337.62	337.62 /hr	370	cu. yds.	0.4	hours	S	146
MSR260_A	2500	0	0.1	0		16 /hr	0,0	Jou. Juo.		hours	S	7
PickupA	1015	0	0.1	0	6.34	6.34 /hr				hours	S	3
- Push bulk of dump into pit (100 ft @ even grade)					0.01	0.01711			0.1	Hours	Ψ	
D8T_A	5460	100.65	0.1	76.75	337.62	337.62 /hr	4555	cu. yds.	9.7	hours	\$	3.291
MSR260_A	2500	0	0.1	0	16	16 /hr		1		hours	\$	156
PickupA	1015	0	0.1	0		6.34 /hr				hours		62
- Push half of the remaining dump material uphill to edge of pit (80 ft)									0.1			JL
D8T_A	5460	100.65	0.1	76.75	337.62	337.62 /hr	2000	cu. yds.	4.2	hours	\$	1,435
MSR260_A	2500	0	0.1	0	16	16 /hr	I I Sur			hours		68
PickupA	1015	0	0.1	0	6.34	6.34 /hr		10000		hours		27
- Push dump matrial from Step 4 into pit (100 ft)								- 1000				
D8T_A	5460	100.65	0.1	76.75	337.62	337.62 /hr	2000	cu. yds.	4.7	hours	\$	1,589
MSR260_A	2500	0	0.1	0	16	16 /hr				hours	S	75
PickupA	1015	0	0.1	0	6.34	6.34 /hr				hours	S	30
Grading - Smaller Northeast and Southeast Piles												
Grade Northeast piles down, and Push Southeast piles into pit (estimate)			816.4									
D8T_A	5460	100.65	0.1	76.75	337.62	337.62 /hr		cu. yds.	5	hours	\$	1,688
MSR260_A	2500	0	0.1	0	16	16 /hr		Jun 1 40.		hours		80
PickupA	1015	0	0.1	0	6.34	6.34 /hr				hours		32
Push Small North Cuts/Dumps (estimate)										nouro		- 02
D8T_A	5460	100.65	0.1	·76.75	337.62	337.62 /hr	-	cu. yds.	2	hours	S	675
MSR260_A	2500	0	0.1	0	16	16 /hr	A COLUMN			hours		32
PickupA	1015	0	0.1	0	6.34	6.34 /hr				hours		13
Ripping & Seeding												
D8T_A	5460	100.65	0.1	76.75	337.62	337.62 /hr	—	cu. yds.	3	hours	S	1,013
MSR260_A	2500	8.95	0.1	0	25	25 /hr		Jou. Juo.		hours		75
PickupA	1015	0	0.1	0	6.34	6.34 /hr	Marine S			hours		19
Spreader (Assumption)						15 /hr				hours		45
Seed Costs (Assumption)	1972 4 70										\$	1,000
Total Direct Costs									36.7			14,268
ndirect Costs							Dava	Deilu T-	al about M/D !	1	T-4-11	h = = 14/5
Daily Personnel Mob/Demob	285	24.55	6.1	76	0461	0101	Days	_	Labor M/D H	lours		bor M/D
quipment Mob/Demob (from modified Division mob/demob)	200	24.55	0.1	76.75	34.84	34.84 /hr	5	4.1	20.33		\$	708
other Indirect Costs (typical 26.8% of Direct Costs, minus 10% for already-inclu	ided mobilder	noh)					40.000				\$	5,644
otal Indirect Costs	T TIOD/GET	liob)	Children Control of the				16.80%				\$	2,397
otal 2015 Reclamation Cost											\$	8,749
											\$:	23,017
015 Escalation Rate									2000			1.2%
Total Reclamation Cost (adjusted to 2018 Dollars)									DOM:		\$;	23,900

Site-Specific Details and Assumptions

These calculations assume **current conditions**. If the operator plans to significantly deepen the pit and expand the dumps, these calculations should be revised. **Volume calculations** assume the following:

- The curved dump has an average cross-sectional area of approximately 1200 square feet, and the dump is 250 feet long.
- An estimated 1500 cubic yards (of the estimated 11,100 cubic yards of dump material) will remain as graded slopes (won't be pushed up into pit)

See Production Sheets for earthworking activities and equipment assumptions.

Topsoil is not available, and is not requireed for successful revegetation in this case.

Ripping costs are conservative assumptions greater than a back of the envelope calculated time.

Equipment and labor costs are taken from R.S. Means 2015 Heavy Construction Cost Data handbook, which is assumed to be conservative for this project. For example, Davis Bacon wages for Box Elder county for operating this type of heavy equipment are well under \$30/hr. The difference should cover any overtime. Seed cost is assumed, and is conservative for current conditions.

Equipment mob/demob was based on the Division's average cost per acre for this location, and modified to be more appropriate.

Labor mob/demob time was determined using the following:

	Travel Distan	122	
	Average Spe	60	
	1-way Travel	2.03	
T	Daily Travel	4.1	